

<b>NASA/GSFC</b>		<b>MISSION OPERATIONS &amp; DATA SYSTEMS DIRECTORATE (MO&amp;DSD)</b> <b>CONFIGURATION CHANGE REQUEST (CCR)</b>							
1. CCR NO.	CCR-530-ICD-08	2. DATE August 20, 1997	3. PRIORITY <input type="checkbox"/> EMERGENCY <input type="checkbox"/> URGENT <input checked="" type="checkbox"/> ROUTINE	4. CHANGE LEVEL <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F					
5. TITLE OF CHANGE SHO Subheaders 5 and 6 LI Expansion for SPTR and DAB, and Project Antenna									
6. DOCUMENT TITLE    ICD Between the NCC/FDF and the WSC									
DOCUMENT NO.    530-ICD-NCC-FDF/WSC, Rev 5, 1 June 1997									
LIST ALL AFFECTED DOCUMENTS INCLUDING PROCEDURES									
ICD Between the NCC/FDF and the WSC for the TDRS H, I, J Era,									
405-TDRS-RP-ICD-001									
(CONT ON ATTACHMENT)									
7. REASON FOR CHANGE									
To expand the LI Channel ID definition in SHO subheaders 5 and 6, including specific allocations for the South Pole TDRS Relay (SPTR) and the Demand Access Buffer (DAB), and Project Antenna.									
(CONT ON ATTACHMENT)									
8. DESCRIPTION OF CHANGE									
Pages 9-9, 9-11, AB-1, AB-4.									
(CONT ON ATTACHMENT)									
9. IMPACT									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;"><b>SYSTEM</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">           YES NO  <input type="checkbox"/> SCHEDULE  <input type="checkbox"/> BUDGET  <input type="checkbox"/> FACILITIES  <input type="checkbox"/> TESTING  <input type="checkbox"/> TRAINING  <input type="checkbox"/> SPECIFICATIONS  <input type="checkbox"/> CONTRACTOR SUPPORT  <input checked="" type="checkbox"/> INTERFACES         </td> <td style="width: 50%;">           YES NO  <input type="checkbox"/> RELIABILITY/MAINTAIN- ABILITY/SAFETY  <input type="checkbox"/> USER SERVICES/MANUALS  <input type="checkbox"/> RISK MANAGEMENT  <input type="checkbox"/> SECURITY  <input type="checkbox"/> USAF FUNDING REQ'D  <input type="checkbox"/> POWER  <input type="checkbox"/> WEIGHT         </td> </tr> </table> </div> <div style="width: 45%;"> <p style="text-align: center;"><b>ORGANIZATIONAL</b></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">           YES NO  <input type="checkbox"/> 501  <input type="checkbox"/> 502  <input type="checkbox"/> 503  <input type="checkbox"/> 510  <input type="checkbox"/> 520         </td> <td style="width: 50%;">           YES NO  <input type="checkbox"/> 530  <input type="checkbox"/> 540  <input type="checkbox"/> 550  <input type="checkbox"/> 560  <input type="checkbox"/> OTHER  <div style="text-align: center;">Code 405</div> </td> </tr> </table> </div> </div>						YES NO <input type="checkbox"/> SCHEDULE <input type="checkbox"/> BUDGET <input type="checkbox"/> FACILITIES <input type="checkbox"/> TESTING <input type="checkbox"/> TRAINING <input type="checkbox"/> SPECIFICATIONS <input type="checkbox"/> CONTRACTOR SUPPORT <input checked="" type="checkbox"/> INTERFACES	YES NO <input type="checkbox"/> RELIABILITY/MAINTAIN- ABILITY/SAFETY <input type="checkbox"/> USER SERVICES/MANUALS <input type="checkbox"/> RISK MANAGEMENT <input type="checkbox"/> SECURITY <input type="checkbox"/> USAF FUNDING REQ'D <input type="checkbox"/> POWER <input type="checkbox"/> WEIGHT	YES NO <input type="checkbox"/> 501 <input type="checkbox"/> 502 <input type="checkbox"/> 503 <input type="checkbox"/> 510 <input type="checkbox"/> 520	YES NO <input type="checkbox"/> 530 <input type="checkbox"/> 540 <input type="checkbox"/> 550 <input type="checkbox"/> 560 <input type="checkbox"/> OTHER <div style="text-align: center;">Code 405</div>
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10. COMMENTS									
STel ANALYST HARDWARE ENGINEER OPERATIONS REPRESENTATIVE SYSTEMS ENGINEER I AND T MANAGER		SIGNATURE _____ _____ _____ _____ _____	DATE _____ _____ _____ _____ _____	CONCURRENCE:  _____ CODE 285  DATE _____					
11. BOARD ACTION		12. DIRECTION/ACTION REQUIRED							
<input type="checkbox"/> APPROVED <input type="checkbox"/> WITHDRAWN <input type="checkbox"/> DISAPPROVED <input type="checkbox"/> DEFERRED UNTIL _____		<input type="checkbox"/> ECP <input type="checkbox"/> TECH DIRECTION <input type="checkbox"/> WAIVER <input type="checkbox"/> PUBLISH DOCUMENT <input type="checkbox"/> DEVIATION <input type="checkbox"/> C.O. LETTER <input type="checkbox"/> CONTRACT MOD <input type="checkbox"/> PUBLISH DCN <input type="checkbox"/> OTHER _____							
13. ORIGINATOR    C. Corbett 505-527-7026		CODE    530.4		14. SEGMENT MANAGER'S APPROVAL					
SIGNATURE _____		DATE _____		SIGNATURE _____					
DATE _____		DATE _____		DATE _____					
15. CCB APPROVAL		16. CCR IMPLEMENTED							
SIGNATURE _____		DATE _____		ATR SIGNATURE _____					
DATE _____		DATE _____		CCB SIGNATURE _____					
DATE _____		DATE _____		DATE _____					

<u># of Bytes</u>	<u>Data Item</u>
	DIS Disable Time
2	Year
3	Day
2	Hours
2	Minutes
2	Seconds
1	Data Source (the following parameters in Subheader No. 5 are for control of the designated Demultiplexer (DEMUX)).
	1 = GSFC Demux
	2 = JSC Demux
	3 = Local Interface (LI)
1	LI***
	0 = Spare (Unused)
	1-4 = Nominal LI Channel ID
	5-9 = Spare (Unused)
	A-D= EDOS Ebnet Channel ID
	E-F = Landsat-7 Channel ID
	<u>G = SPTR Channel ID</u>
	<u>H = DAB Channel ID</u>
	<u>I = Project Antenna Channel ID</u>
	<u>J</u> <del>G</del> -X = Spare (Unused)
	Y-Z = LI Test Channel ID
	a-z = Spare (Unused)
2	Port Address*
	4 Hexadecimal characters
1	Blocked/Unblocked Data*
	1 = BLOCKED
	2 = Unblocked
1	Clamped/Unclamped Clock*
	1 = Clamped
	0 = Unclamped
1	Clock Tracking* **
	1 = Yes
	0 = No

\* Applicable to MDM only.

\*\* The clock tracking parameter for DEMUX configuration shall not be used for Shuttle Forward Data or for any End-to-End Test user return data.

\*\*\* A zero (0) shall be specified if the data source is not LI.

<u># of Bytes</u>	<u>Data Item</u>
2	Hours
2	Minutes
2	Seconds
1	Data Destination
	1 = LI
	2 = HDRM
	3 = MDM
	4 = Record Only
	5 = Television (TV) - Shuttle Only
	6 = Analog Data - Shuttle Only
1	LI*
	0 = McMurdo TDRS Relay System (MTRS) High Rate Channel ID
	1-4 = Nominal Low Rate (LR) Channel ID 100 BPS $\leq$ Data Rate $\leq$ 10 MBPS (Low Rate)
	5-8 = Nominal High Rate (HR) Channel ID 10 MBPS < Data Rate $\leq$ 300 MBPS (High Rate) If Data rate is $\geq$ 150 MBPS, 5-8 specifies the service, i.e., no Q-Channel specified.
	9 = Spare (Unused)
	A-F = EDOS EBnet Low Rate Channel ID
	G-H = EDOS GSIF High Rate Channel ID
	I-J = Landsat-7 Low Rate Channel ID
	<u>K = SPTR SSAR Low Rate Channel ID</u>
	<u>L = SPTR KSAR Low Rate Channel ID</u>
	<u>M-N = DAB Low Rate Channel ID</u>
	<u>O = Project Antenna Low Rate Channel ID</u>
	<u><del>P</del>K-R = Spare (Unused)</u>
	S-V = LI Test Low Rate Channel ID
	W-Z = LI Test High Rate Channel ID
	a-z = Spare (Unused)
1	HDRM
	0 = Not used
	1-4 = Input Port Number

\* A zero (0) shall be specified if the data destination is not LI.

# Abbreviations and Acronyms

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ACS	Attitude Control System
ADPE	Automatic Data Processing Equipment
ASCII	American Standard Code for Information Interchange
BED	Block Error Detector
BER	Bit Error Rate
BPSK	Binary Phase Shift Keying
BR	Bit Rate
CAB	Circuit Assurance Block
CCB	Configuration Control Board
CCR	Configuration Change Request
CDCN	Control and Display Computer Network
CMD	Command
CTFS	Common Time and Frequency System
<a href="#">DAB</a>	<a href="#">Demand Access Buffer</a>
DCN	Document Change Notice
DEMUX	Demultiplexer
DG	Data Group
DIS	Data Interface System
DQM	Data Quality Monitor
EBnet	EOSDIS Backbone Network Communications
EDOS	EOS Data and Operations System
EET	End-to-End Test
EIRP	Effective Isotropic Radiated Power
EOS	Earth Observing System
EOSDIS	EOS Data and Information System
EOT	End of Track
ETRO	Estimated Time of Return to Operation
EXEC	Executive

ODM	Operations Data Messages	
OPM	Operations Messages	
PDA	Pin Diode Attenuator	
PM	Preventative Maintenance	
PMMS	Performance Measuring and Monitoring Subsystem	
PTE	PMMS Test Equipment	
Q	Quadrature (channel)	
QPSK	Quadrature Phase Shift Keying	
RCP	Right-Hand Circular Polarization	
RF	Radio Frequency	
SA	Single Access	
SDU	Signal Distribution Unit	
SGLT	Space Ground Link Terminal	
SHO	Schedule Order	
SIC	Support Identification Code	
SLR	Service Level Report	
SMA	S-Band Multiple Access	} S-Band Multiple Access refers to the MA services provided by TDRSs with ID's 1307, 1308 or 1309.
SMAF	S-Band Multiple Access Forward	
SMAR	S-Band Multiple Access Return	
<a href="#">SPTR</a>	<a href="#">South Pole TDRS Relay</a>	
SQPSK	Staggered Quadrature Phase Shift Keying	
SRDP	Shuttle Return Data Processor	
SSA	S-Band Single Access	
SSAF	S-Band Single Access Forward	
SSAR	S-Band Single Access Return	
SSH	S-Band Shuttle	
SUE	Shuttle-Unique Equipment	
SUPIDEN	Support Identifier	
TDM	Tracking Data Messages	
TDR	Tracking and Data Relay	